AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions, and listing of claims in the application:

LISTING OF CLAIMS:

1. (Currently amended) A pipe feeding mechanism of an automatic pipe bender, comprising a shell movably supported above a main holding portion of a pipe bender;

a gear rack fixedly disposed under the shell on the main holding portion;

a power source fixed to an outer side of the shell; the power source having a rotary output shaft;

a first planetary gear device arranged in an upper portion of the shell; the first planetary gear device including:

(1) a central toothed shaft connected with the output shaft of the power source; the central toothed shaft having gear teeth around a lower end thereof; the central toothed shaft having a fixing block secured thereto;

(2) an actuating gear arranged around the central toothed shaft; the actuating gear having gear teeth on an inner side thereof;

(3) a plurality of planet pinions rotary on respective shafts and engaged with the gear teeth of the central toothed shaft and the actuating gear;

(4) an upper rotary support for supporting the shafts of the planet pinions thereon; and

(5) a pair of clutch devices for releaseably securing the upper rotary support to the fixing block of the central toothed shaft so that upper support can be directly made to rotate by the central toothed shaft; the clutch devices being arranged under a clutch seat secured to the upper rotary support; and

a second planetary gear device arranged under the first planetary gear device; the second planetary gear device including:

(1) a central toothed shaft connected with the upper rotary support of the first planetary gear device; the central toothed shaft having gear teeth around a lower end thereof;

(2) a fixed sun gear fixedly disposed around the central toothed shaft; the sun gear having gear teeth on an inner side thereof;

(3) a plurality of planet pinions rotary on respective shafts and engaged with the gear teeth of the central toothed shaft and the sun gear;

(4) a lower rotary support for supporting the shafts of the planet pinions thereon; the lower rotary support having gear teeth around a lower end thereof; the toothed lower end of the lower rotary support being engaged with the gear rack;

(5) a brake device for releaseably blocking rotation of the actuating gear of the first planetary gear device so that the actuating gear can function as a sun gear;

thereby being capable of making the first planetary gear device stop functioning, and the upper rotary support rotated at a same speed as the central toothed shaft of the first planetary gear device during a return stroke of a pipe feeding cycle after the clutch devices are switched to a clutching position, and after the brake device is switched to a releasing position, and thereby allowing the first planetary gear device to function together with the second planetary gear device to increase ~~torque~~ output torque during a forward feeding stroke of a pipe feeding cycle after the clutch devices are switched to a releasing position, and after the brake device is switched to a braking position.

2. (Original) The pipe feeding mechanism of an automatic pipe bender as claimed in claim 1, wherein a bearing is arranged between the central toothed shaft and the upper rotary support of the first planetary gear device.

3. (Original) The pipe feeding mechanism of an automatic pipe bender as claimed in claim 1, wherein the fixing block of the first planetary gear device has a plurality of clutch plates secured to a lower side thereof.

4. (Original) The pipe feeding mechanism of an automatic pipe bender as claimed in claim 1, wherein a bearing is arranged between the upper rotary support and the actuating gear of the first planetary gear device while another bearing is arranged between the actuating gear and the shell.

5. (Original) The pipe feeding mechanism of an automatic pipe bender as claimed in claim 1, wherein a brake plate is secured to a lower side of the actuating gear of the first planetary gear device while each of the brake devices has a brake plate opposing the brake plate of the actuating gear.

6. (Original) The pipe feeding mechanism of an automatic pipe bender as claimed in claim 1, wherein a bearing is provided between the central toothed shaft and the lower rotary support of the second planetary gear device while another bearing is provided between the lower rotary support and the fixed sun gear.